Bauknecht

Service Manual

Washing machine
Frontloader
WAI 2542/2

Model WAI 2542/2
Version 8554 975 15900

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Family	SC 1

Global White

This documentation is only intended for qualified technicians who are aware of the respective safety regulations.

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Subject to modification
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Technical data

Dimensions

Height	81.5 - 84	cm
Width	59.5	cm
Depth	57.3	cm

Weight

Net weight	~72	kg
With package	~74	kg

Main Connection

Voltage	230	V ± 10%
Frequency	50	Hz
Power consumption	~2.3	kW
Fuse rating	10	A

Drum

Volume	48	l
Wash spin	54	rpm
Ramp speed	95	rpm
Speed spinning max.	1200	rpm

Capacity of dry laundry

Cotton/coloured	5	kg
Cotton rapid	3	kg
Cotton short	5	kg
Easy care	2.5	kg
Easy care rapid	1.5	kg
Easy care short	2.5	kg
Delicate	1.5	kg
Wool	1	kg
Handwash/Silk	1	kg
Daily/Chrono	3	kg

Pressostat

Kind of switch	1-level pressoswitch with overflow contact	
Type	760/B1-223	
Water Level		
Level 1 (11 - 12, 14)		
Switching point	60 ± 5	mmWc
Switching back point	35 ± 5	mmWc
Overflow (11 - 16)	300 ± 20	mmWc
Nominal currents		
Contacts		
11 - 12	4 (4)	A
11 - 12	0.1 (0.1)	A
11 - 14	16 (4)	A
11 - 16	1 (1)	A

Door lock

Kind of switch	Switch with PTC heater of Bimetal	
Type	DA	
Nominal voltage	230 (90 - 264) V	
Nominal current:		
Contact 4 - 5	16 (4)	A
Lock time	≤6”	
Unlock time	≤35 - 65/85”	

Heating element

Kind of heating	Tubular heating element with NTC - sensor	
Nominal voltage	230 +10%, -15% V	
Nominal power	2050	W ± 5%
Resistance (20 ˚C)	28/26	Ω ± 5%
Thermo-fuse (switch OFF temperature)	152/167	˚C
Leakage current (<99 ˚C)	<0.8	mA

NTC sensor

Class of protection	II	
Resistance NTC:		
0 ˚C	35.9	kΩ ± 5.8%
30 ˚C	9.8	kΩ ± 3.7%
40 ˚C	6.6	kΩ ± 3.1%
50 ˚C	4.6	kΩ ± 2.6%
60 ˚C	3.2	kΩ ± 2.0%
70 ˚C	2.3	kΩ ± 2.5%
95 ˚C	1.1	kΩ ± 3.7%

Inlet valve

Kind of valve	1-way valve for cold water	
Water temperature	<90	˚C
Rated flow >1 bar	8	l/min ± 10%
Pressure range	0.2 - 10	bar
Nominal voltage	220 - 240	V
Frequency	50	Hz
Nominal current	35	mA
Nominal power	6	W ± 10%
Nominal resistance	3.8/4.1	kΩ ± 10%

Switch aquastop

Nominal voltage	230	V
Nominal current	3 (1)	A
Operating force	<15	kΩ

Technical data

Drain pump (synchronous)

Type	58574	
Nominal power	34	W
Nominal/max. current	0.3/0.5	A
Rotation speed	3000	rpm
Resistor (coil) (20 ˚C)	155	Ω
Capacity (0.55 - 1.0 m)	14 ± 2	l/min
Overheating protection	yes	

Program timer

Type	SC1 - 3340	
Timer basic	4619 710 74694	
Timer programmed	4619 751 53611	
Nominal voltage	230	V
Frequency	50	Hz
Positions	32	

Motor

Type	MCA 52/64-148/WHE 5	
Belt ratio	i = 1:13.3	

Resistance contacts (20 ˚C)

Stator (full field)	1.46	Ω ± 7%
Stator (tapped field)	0.65	Ω ± 7%
Rotor	2.15	Ω ± 7%
Tachogenerator	68.7	Ω ± 7%
Input power (230 V AC)		
Washing	188	W ± 7%
Rinsing	285	W ± 7%
Spinning	330	W ± 10%
Spinning (taped field)	485	W ± 10%

Radio interference supression

Rated voltage	90 - 250/265 V	
Rated current	16	A
Frequency	50/60	Hz
Nominal capacity	470/500nFX1+2x22nFY ± 20%	
Nominal inductance	2 x 470/500 µ H -30+50%	
Nominal resistance	680	kΩ ± 10%
Derivation current (u = 250 V AC)	≤ 4.15 (2 x 2.075) mA	

Main switch

Type	1DLF1006	
Nominal voltage	250	V
Nominal current	16 (5)	A
Poles	2	
Functionality	Normally opened	
Connection in RAST 5	6.3	pins
Connection lamp	2.8	pins

Option switch

Nominal voltage	5	V DC
Nominal current	1	mA
Poles	1	
Functionality	Normally opened	
Connection	RAST 2.5	

Pilot lamp

Type	17.9	
Nominal voltage	230	V

Temperature/spin speed selector

Type		04-0084.0006	
Positions		7	
Nominal voltage		5	V
Nominal current		1	mA
Poles		1	
Connection		RAST 2.5	
Value of resistors ± 5%:			
5 - 6	pos.1	<10	Ω
«-»	pos.2	0.68	kΩ ± 5%
«-»	pos.3	1.10	kΩ ± 5%
«-»	pos.4	1.80	kΩ ± 5%
«-»	pos.5	2.70	kΩ ± 5%
«-»	pos.6	3.60	kΩ ± 5%
«-»	pos.7	4.70	kΩ ± 5%

Push button switch

- Eco
- Rapid
- Intensive rinse
- Rinse hold

Indication safety

Type	3956 B	
Input/Output	PI4.1-PI4.4	5 V

Spare part list

Model **WAI 2542/2**
Service No. **855497515900**
Version **855497515900**

Pos. No.	12NC Code	Description
001 0	**4812 440 10748**	Cabinet GW
003 0	**4812 464 48112**	Traverse BK-cold
004 0	**4812 440 19479**	Drip tray assy BI
011 0	**4812 500 18099**	Adjust. foot M8, 112mm
011 1	**4812 500 18074**	Foot leveling kit 85mm
021 0	**4812 440 19424**	Panel, front
021 1	**4812 462 79654**	Stopper
024 0	**4812 440 18998**	Panel, rear
025 0	**4819 404 79271**	Holder Contr. Device
033 0	**4812 310 18414**	Cover plate BI
040 0	**4812 417 18794**	Hinge
040 2	**4812 417 19304**	Hinge
040 3	**4812 417 28002**	Insert shim 1mm
040 4	**4812 417 18811**	Cover, hinge BI,WT F.MAGNET
040 5	**4812 502 18007**	Screw M 5x16-H
050 0	**4812 459 38059**	Plinth GW
050 1	**4812 440 98264**	Spacer f. pedestal
061 0	**4812 466 88458**	Counterweight upper
061 1	**4812 466 88462**	Counterweight Lower
061 2	**4819 310 39227**	Mounting kit Weight top
061 3	**4819 310 39228**	Mounting kit Weight bottom
065 0	**4812 310 18341**	Insulation B. in front
065 2	**4812 310 18401**	Insulation
065 4	**4812 310 18335**	Insulation Middle Panel
065 5	**4812 310 18336**	Insulation Lower
081 0	**4812 466 48088**	Shock absorber 1400
084 0	**4812 466 58001**	Silent block
086 2	**4812 401 18412**	Stopper
110 0	**4812 310 28224**	Door handle WH KIT
130 0	**4812 417 28053**	Plate Door lock Upper
130 1	**4812 417 28052**	Plate Door lock Lower
131 0	**4812 417 28051**	Lock door
131 1	**4812 417 28045**	Pin Door Lock
131 2	**4812 492 58025**	Spring door
134 0	**4812 417 48001**	Magnet + Buffer
134 1	**4812 417 28001**	Insert
134 2	**4812 502 48345**	Screw 4X 16-Z
135 1	**4812 401 18417**	Stopper
135 2	**4812 492 58023**	Spring Door Safety
140 0	**4812 450 58983**	Door glass
143 0	**4812 440 10749**	Glass door frame GW
144 0	**4812 417 19168**	Frame, door glass GW
191 0	**4812 460 68532**	Door bellow WH grease resistance
191 1	**4812 492 18017**	Strap
191 2	**4812 492 98011**	Strap
200 1	**4812 418 18369**	Tub, half front 48 l
200 2	**4812 418 18318**	Tub 48 l rear
200 4	**4812 290 88054**	Clamp for tub
220 0	**4812 418 18191**	Drum 1200 0,5MM PP 48L
271 0	**4812 358 18056**	V-ribbed belt WH 1250 J5
272 0	**4812 528 58041**	Pulley 298/5 arm
272 3	**4812 505 18371**	Nut M 12
292 0	**4812 530 58101**	Gasket Tub
301 0	**4812 452 12212**	Control panel GW
301 3	**4812 452 12213**	Control panel side part GW
301 4	**4812 452 12426**	Frame switch GW
303 0	**4812 498 18257**	Handle, drawer GW
303 1	**4812 498 18258**	Handle, cover GW
321 0	**4812 452 12762**	Insert panel WAI 2542/2
331 0	**4812 413 48366**	Knob, timer GW
331 1	**4812 413 48367**	Knob printed GW
332 0	**4812 410 29102**	Push button GW
333 0	**4812 410 29101**	Push button Start CP GW
339 1	**4812 413 18215**	Adapter axle 90 degree
339 2	**4812 413 18216**	Adapter f. button
341 0	**4812 413 78715**	Indication disc GW
350 1	**4812 239 58017**	Display Modul Aquastop/Door
351 0	**4812 134 18011**	Lamp
400 0	**4812 361 58376**	Motor MCA52WHE0
400 1	**4812 502 18382**	Screw M8 X 35
409 0	**4812 362 48004**	Brush, carbon motor CESET
421 0	**4812 121 18142**	Interf. filter 1,00 µ F
430 0	**4812 360 18532**	Pump, draining BI/SC1
451 0	**4812 259 28823**	Heating element 240 V with NTC
480 0	**4812 321 78218**	Cable SC1D-MOT 7
490 0	**4812 321 18043**	Connect. cable 5m
491 0	**4812 321 28367**	Strain relief
491 1	**4812 502 38152**	Screw 4.8x19
500 0	**4812 282 19879**	Timer SC1
571 0	**4812 271 28375**	Valve, magnet Single
581 0	**4812 271 28441**	Pressostat
620 0	**4819 410 28998**	Switch options
621 0	**4819 410 29004**	Switch ON/OFF
622 0	**4812 273 48002**	Selector Temp./Spin
630 0	**4812 280 58044**	Door lock
631 0	**4812 271 38358**	Switch MICRO
631 1	**4812 360 58112**	Floater Kit BK, WH
651 0	**4812 134 48294**	Light guide
691 0	**4812 282 19485**	Sensor NTC SC1
701 0	**4812 530 28781**	Hose, inlet 3.8 m (Eltek)
701 0	**4812 530 29256**	Hose, inlet 1.8 m (Eltek)
701 0	**4819 530 28926**	Hose, inlet 2.5 m (Eltek)
702 0	**4819 530 29019**	Hose intern
707 0	**4812 526 48031**	Nozzle Distribution
707 1	**4812 526 48028**	Nozzle
708 1	**4812 530 48143**	Bend
711 0	**4812 418 88025**	Dispenser BK, WH-3CH
712 0	**4812 418 88051**	Drawer Detergent
713 0	**4812 418 89037**	Flap Detergent Cont. 3 ch. GW
717 0	**4819 321 28092**	Bowden cable
717 1	**4812 321 38013**	Lever, Nozzle
717 2	**4812 321 38012**	Holder, adjust.
717 3	**4812 278 88018**	Slide
717 4	**4812 492 38359**	Spring, Nozzle
717 5	**4812 282 19435**	Cam 3 C. for built in
717 7	**4812 502 18409**	Screw cam actuator
718 0	**4812 526 48157**	Siphon 3 Chamber GW
718 1	**4812 418 88018**	Separator 3ch
750 0	**4812 530 48153**	Chamber, expand. BUILT-IN
753 1	**4819 418 68234**	Chamber, air

Spare part list

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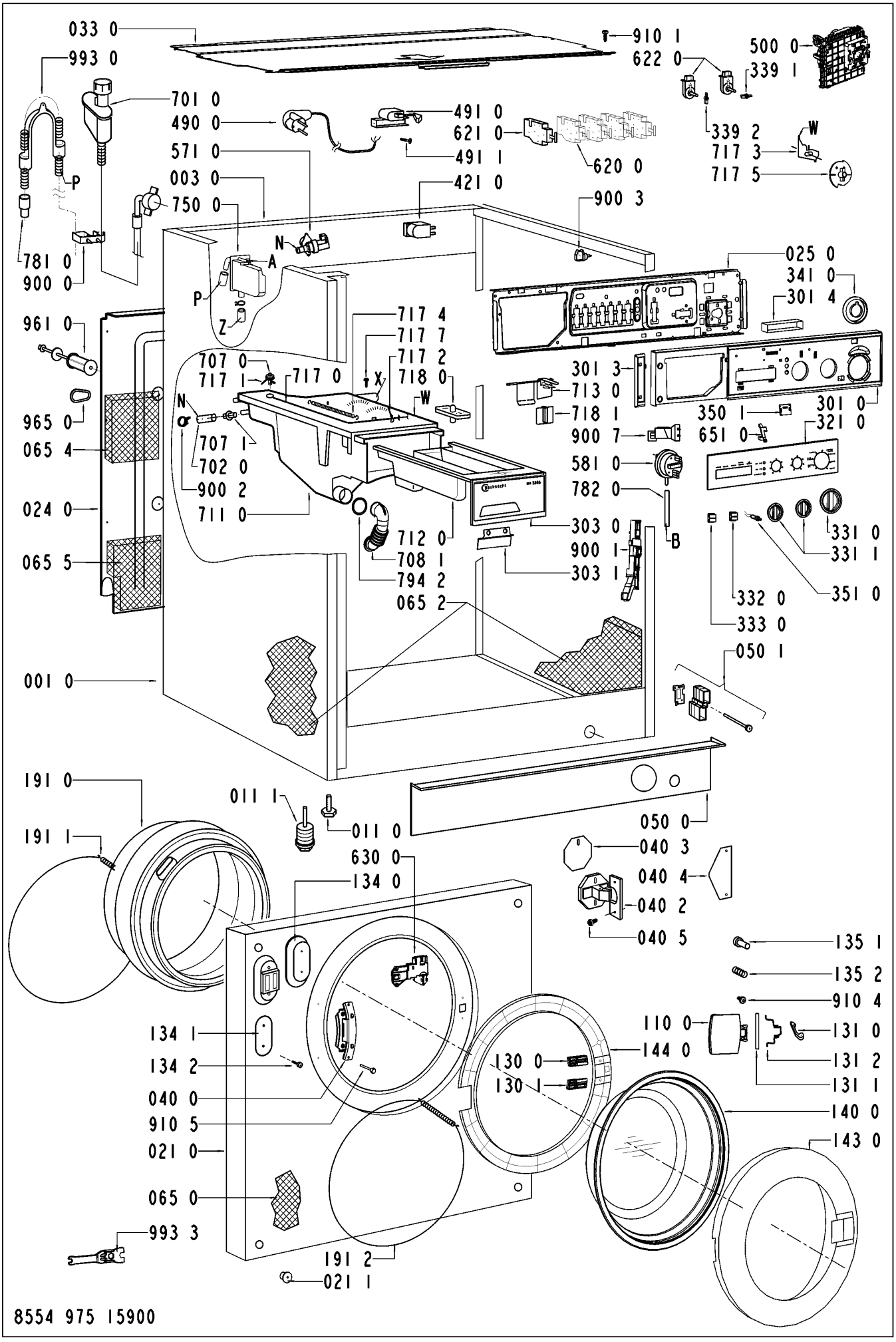
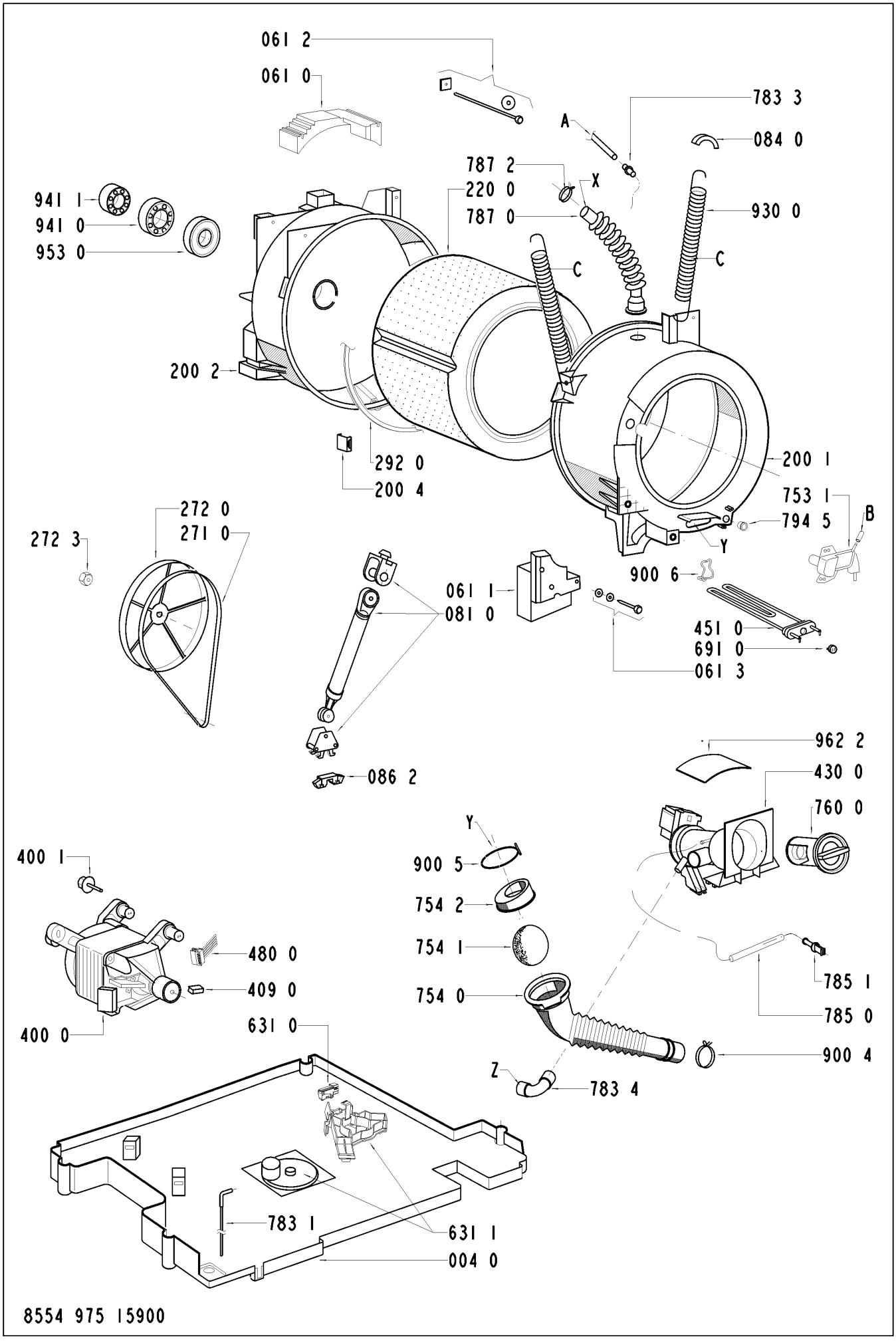
Service No. **855497515900**
Version **855497515900**

Pos. No.	12NC Code	Description
754 0	**4812 530 28826**	Drainhose
754 1	**4812 530 28832**	Lock eco
754 2	**4812 530 28829**	Flange eco
760 0	**4819 480 58106**	Cover, pump
781 0	**4819 530 28959**	Hose
782 0	**4812 530 28827**	Hose Pressostat
783 1	**4812 530 28822**	Hose
783 3	**4812 530 18001**	Connection Part
783 4	**4812 530 28818**	Hose
785 0	**4812 530 28812**	Hose Draining
785 1	**4812 462 78179**	Threaded cap
787 0	**4812 530 28819**	Hose with hole
787 2	**4819 401 18174**	Clamp, hose 25-45 mm
794 2	**4812 530 58005**	O-Ring
794 5	**4812 530 58098**	Gasket Airtrap
900 0	**4812 255 18204**	Holder Hose outlet
900 1	**4812 290 88049**	Bracket
900 2	**4812 401 18501**	Clamp, hose 19.2 mm
900 3	**4812 401 18446**	Cable clamp
900 4	**4812 401 18414**	Clamp, hose
900 5	**4819 401 18529**	Clamp, hose
900 6	**4812 290 18031**	Clamp heating element+screw
900 7	**4812 255 18205**	Holder Pressostat
910 1	**4812 404 48527**	Screw 4.2x9.5
910 4	**4812 930 08022**	Screw 4.2x13-F-H
910 5	**4812 502 18619**	Screw M5/8
930 0	**4819 492 38139**	Spring Suspension
941 0	**4812 520 28004**	Bearing, ball 6206
941 1	**4812 520 28066**	Bearing, ball 6204
953 0	**4812 530 58099**	Shaft seal 1200
961 0	**4819 532 68829**	Spacer
962 2	**4812 360 78035**	Foil Water protect.
965 0	**4812 466 68545**	Cover BK/WH
993 0	**4819 530 29028**	Bow
993 3	**4812 395 58004**	Tool

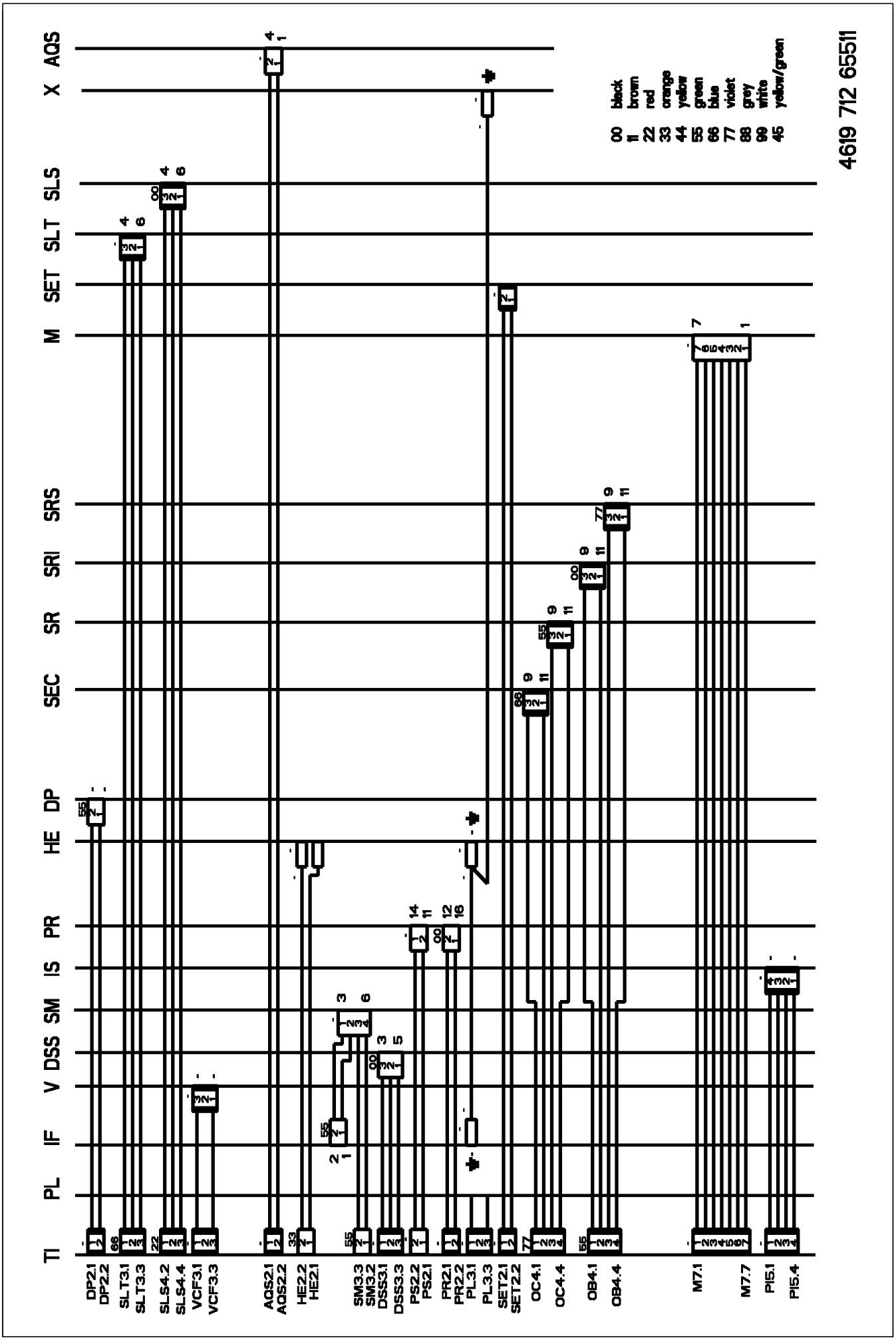
Exploded view



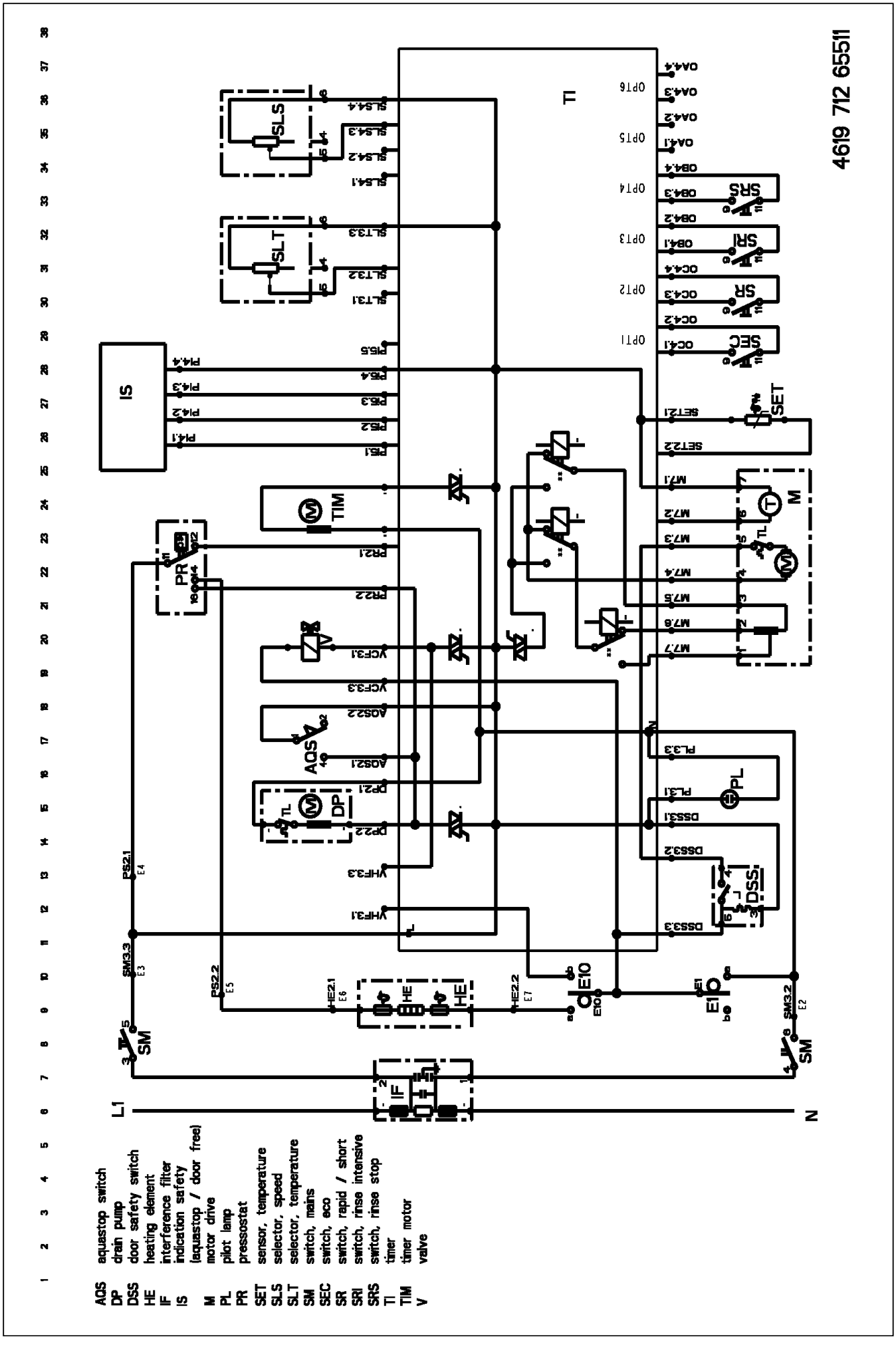
Exploded view



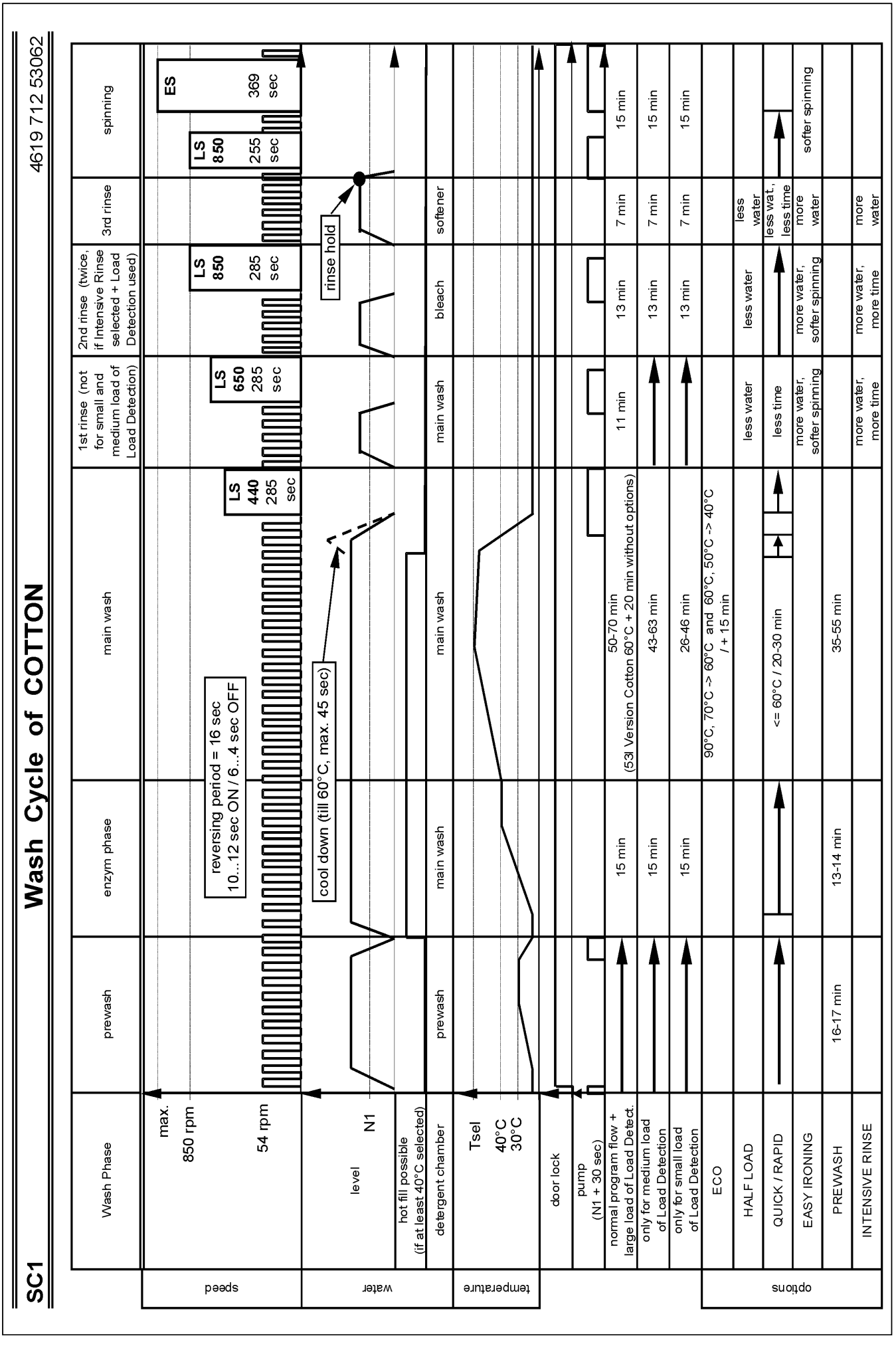
Wiring diagram



Circuit diagram



Program chart



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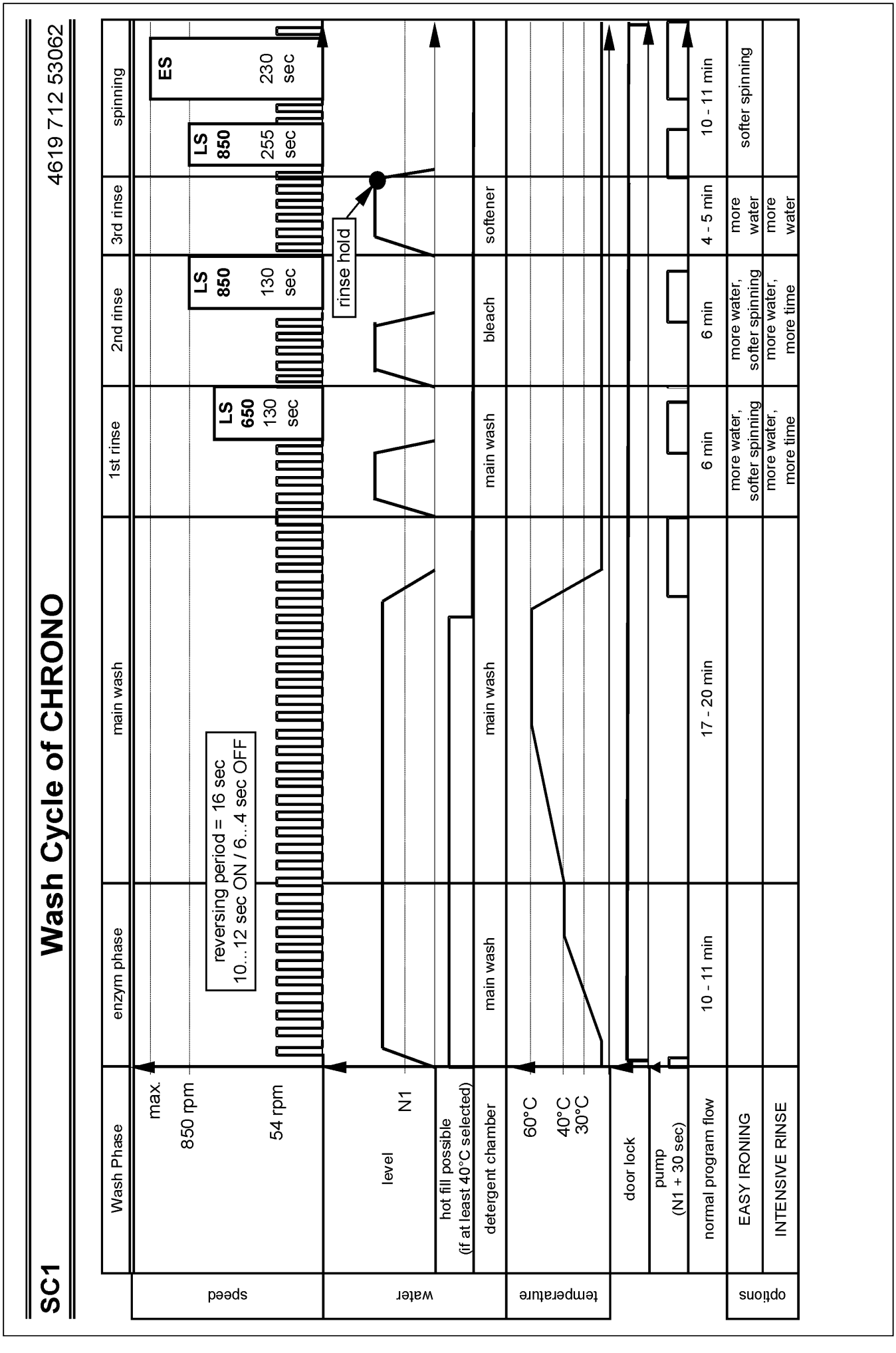

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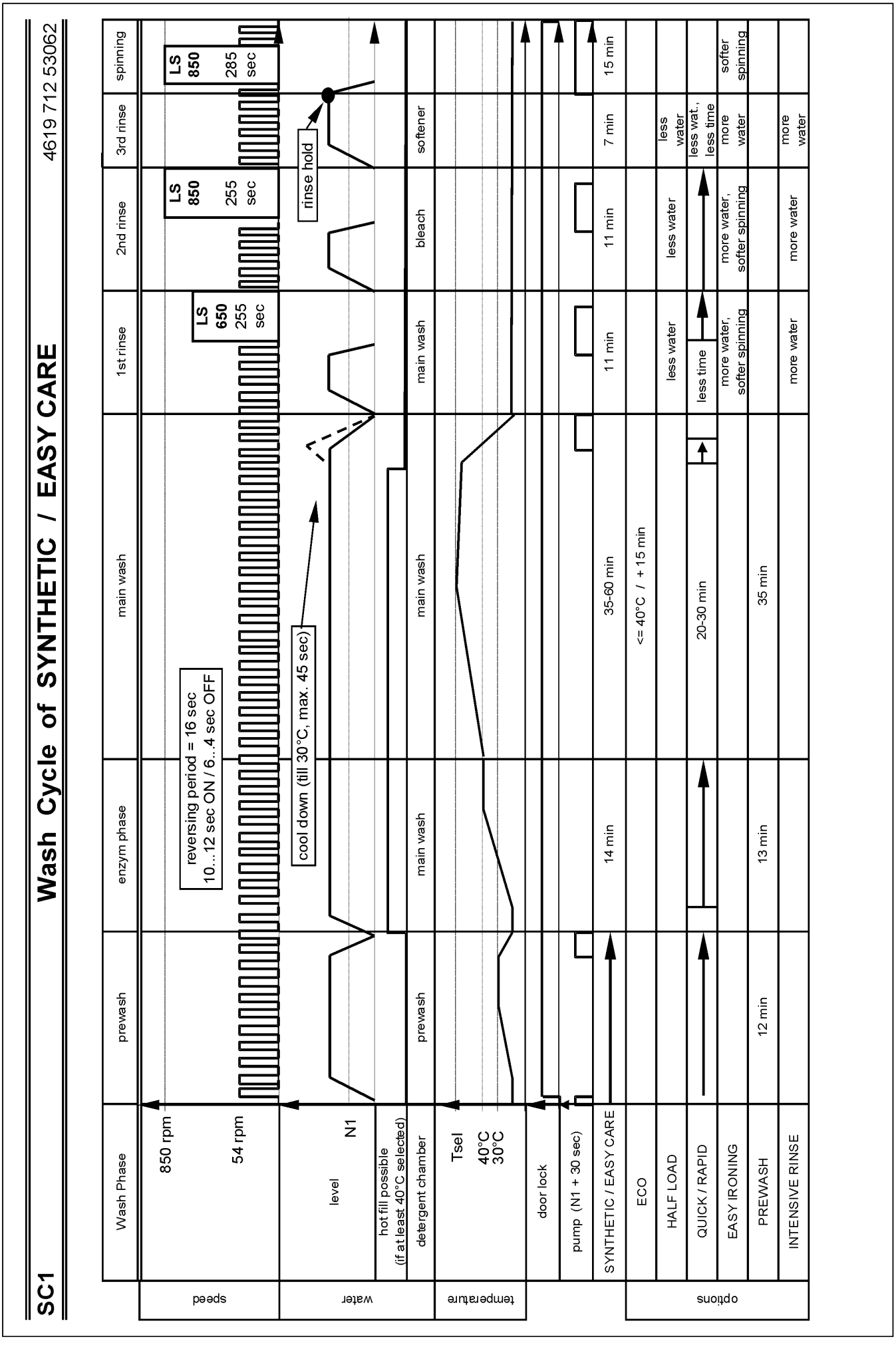
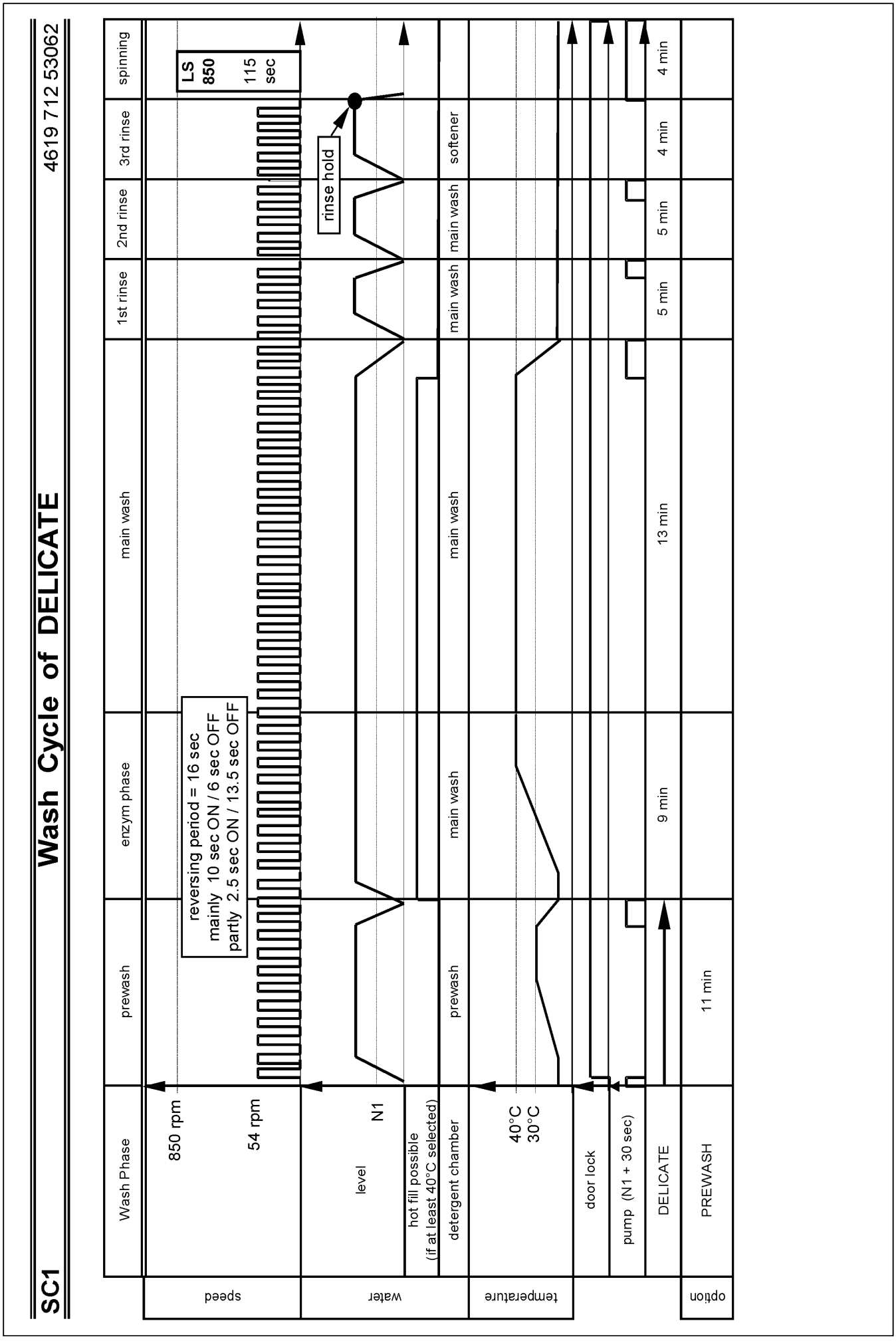
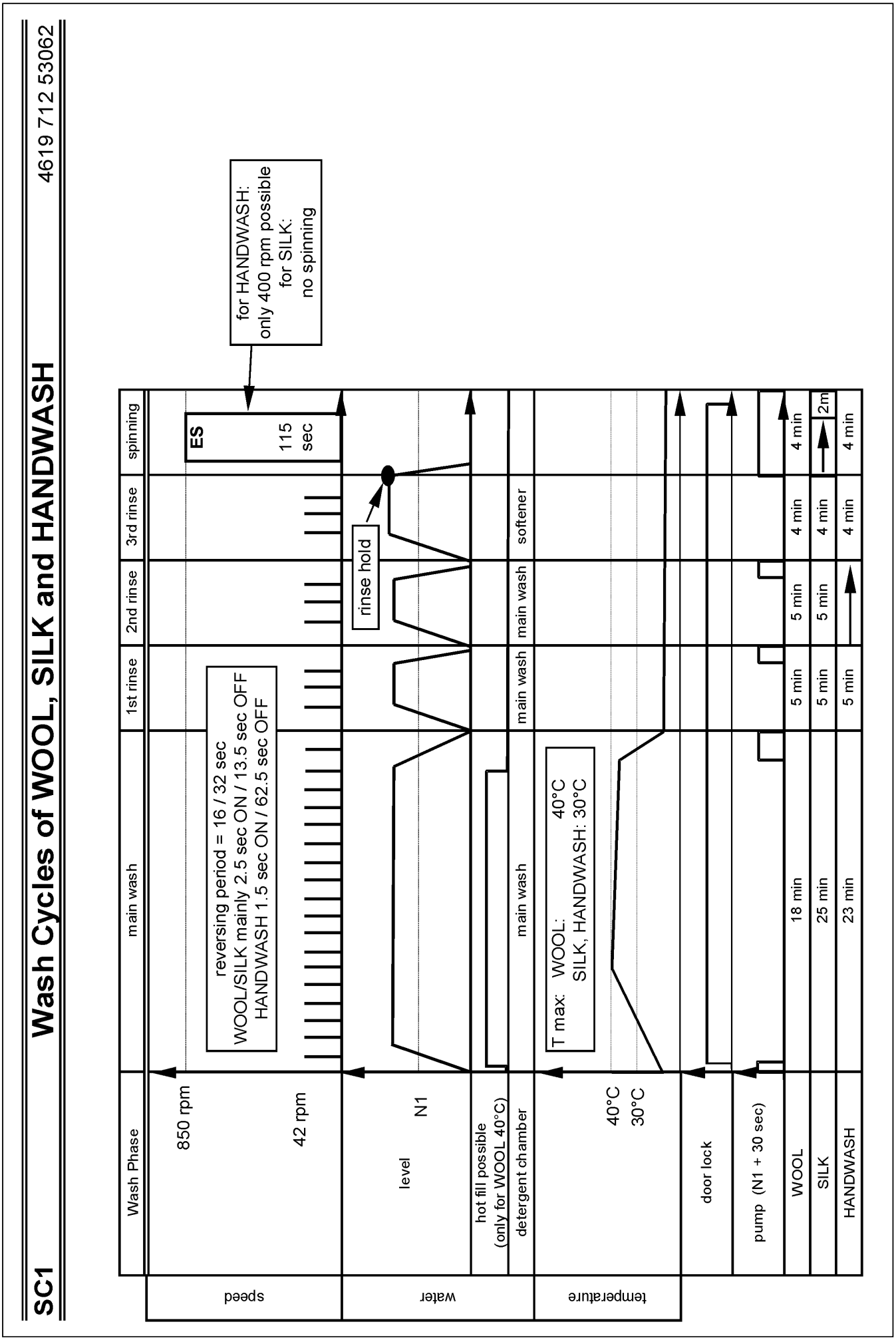


Program chart



Program chart

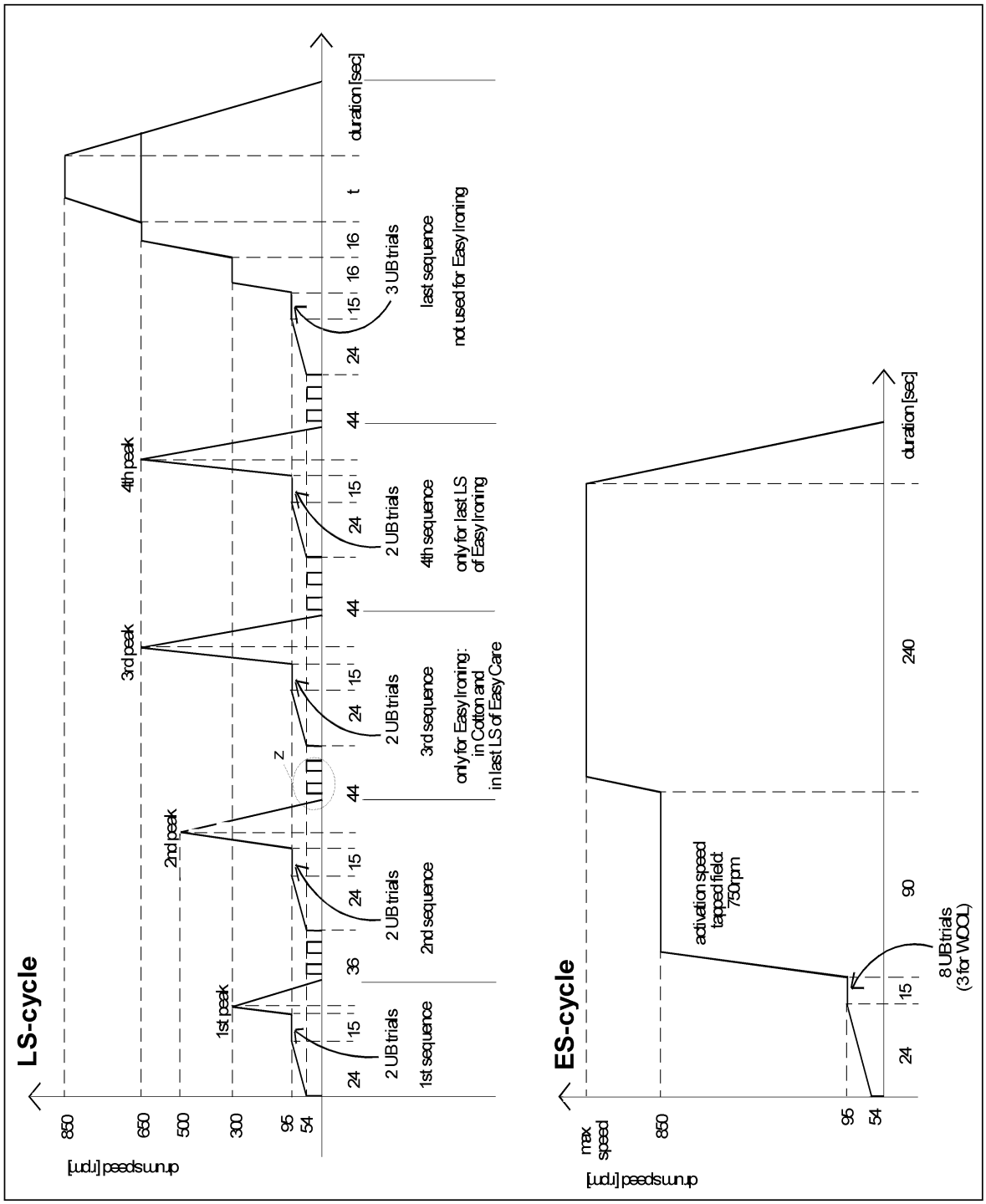


Program chart

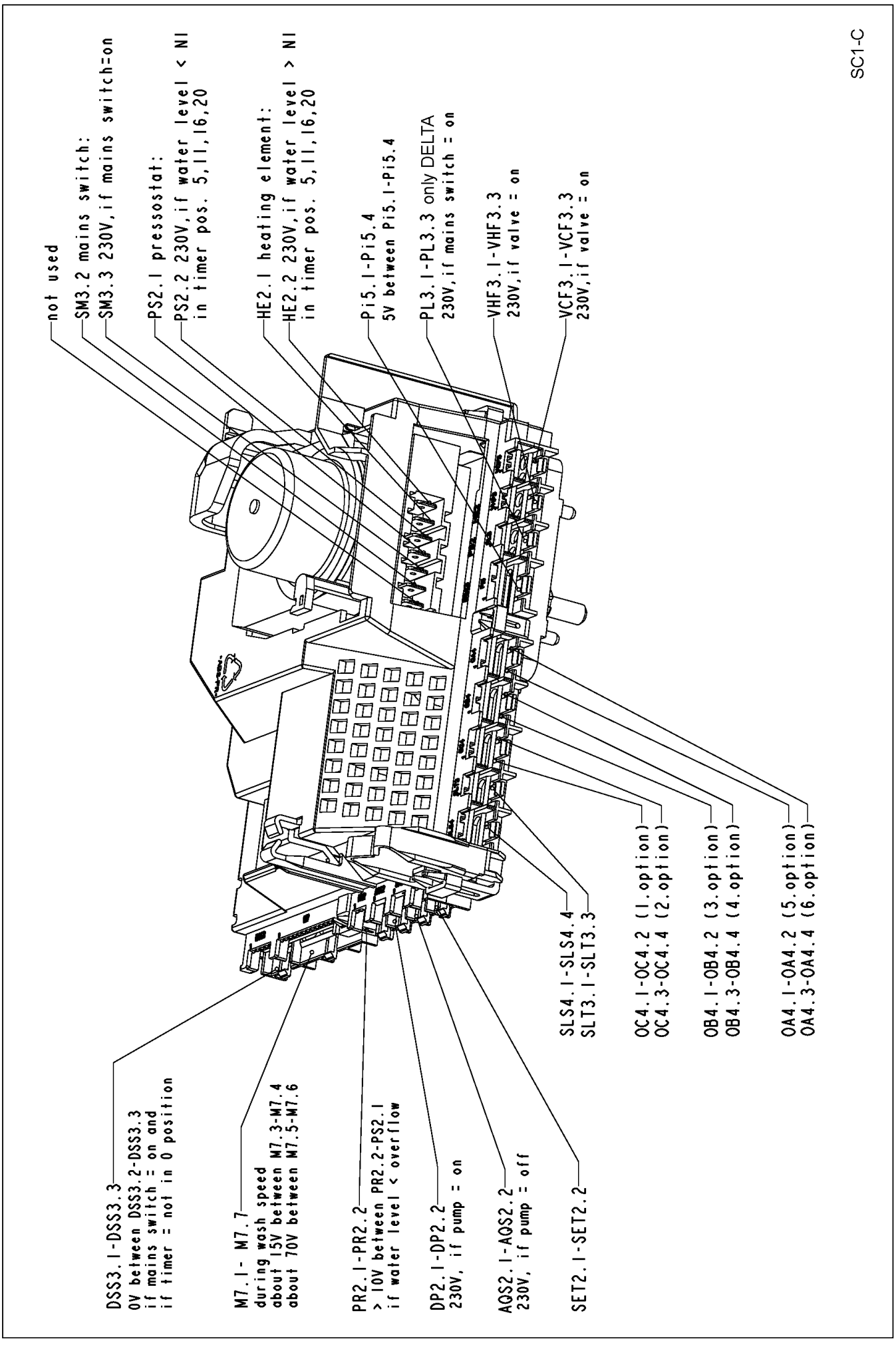
SC1

Spinning Profiles

4619 712 53062



Text/Legend


not used
SM3.2 mains switch:
SM3.3 230V, if mains switch=on
PS2.1 pressostat:
PS2.2 230V, if water level < NI
in timer pos. 5,11,16,20
HE2.1 heating element:
HE2.2 230V, if water level > NI
in timer pos. 5,11,16,20
Pi5.1-Pi5.4
5V between Pi5.1-Pi5.4
PL3.1-PL3.3 only DELTA
230V, if mains switch = on
VHF3.1-VHF3.3
230V, if valve = on
VCF3.1-VCF3.3
230V, if valve = on
SC1-C
DSS3.1-DSS3.3
0V between DSS3.2-DSS3.3
if mains switch = on and
if timer = not in 0 position
M7.1- M7.7
during wash speed
about 15V between M7.3-M7.4
about 70V between M7.5-M7.6
PR2.1-PR2.2
> 10V between PR2.2-PS2.1
if water level < overflow
DP2.1-DP2.2
230V, if pump = on
AQS2.1-AQS2.2
230V, if pump = off
SET2.1-SET2.2
SLS4.1-SLS4.4
SLT3.1-SLT3.3
OC4.1-OC4.2 (1.option)
OC4.3-OC4.4 (2.option)
OB4.1-OB4.2 (3.option)
OB4.3-OB4.4 (4.option)
OA4.1-OA4.2 (5.option)
OA4.3-OA4.4 (6.option)